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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,551	12/14/2000	Satoshi Kidooka	P20361	6566

7055 7590 05/15/2006

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EXAMINER

LAM, ANN Y

ART UNIT PAPER NUMBER

1641

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/735,551	<b>Applicant(s)</b> KIDOOKA ET AL.	
	<b>Examiner</b> Ann Y. Lam	<b>Art Unit</b> 1641	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 February 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-5,29 and 32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 29 and 32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5, 29 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu, Japanese Utility Model Publication No. Hei-7-51066, in view of Bellhouse et al., 6,010,478.

Shimizu discloses the invention substantially as claimed. More specifically, Shimizu discloses an endoscope comprising:

- a treatment instrument channel (i.e., endoscope, page 1);

- an endoscopic spraying instrument (4) comprising:

- a liquid supplying tube (7) configured to pass liquid therethrough and to be removably inserted into the treatment instrument channel (endoscopes, page 1);

- a rotatably guiding groove (8) disposed at a leading end side of the supplying tube and configured to rotate the liquid about a central axis;

- a liquid rotating chamber (10) disposed at a leading end side of the rotatably guiding groove, the liquid rotating chamber configured to rotate the liquid therein;

a spray nozzle (distal end portion of 10) formed in a leading end wall of the liquid rotating chamber and configured to discharge the liquid from the liquid rotating chamber; and

a wall surface (5a and 5b) outwardly extending from an outer periphery of the spray nozzle and is a tapered surface.

However, Shimizu does not disclose an annular, protruded wall extending in a forward direction and at an angle different from said wall surface, wherein said annular, protruded wall is configured to reflect liquid ejected from said spray nozzle. This limitation is taught by Bellhouse et al.

Bellhouse et al. disclose an injection device with a nozzle that has annular, protruded wall (13, see fig. 1) extending in a forward direction and at an angle different from a wall surface (near 12). Bellhouse et al. teach that particles are carried out through element (13) and into contact with a target surface (col. 7, lines 38-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an annular, protruded wall as taught by Bellhouse et al. in the Shimizu invention because Bellhouse et al. teach that such a wall provides the advantage of carrying out particles out of a divergent surface into contact with a target surface. Also, such a modification would have involved a mere change in the size or shape of a component. A change in size or shape is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

The Office notes that the nozzle disclosed by Bellhouse et al. is configured to reflect liquid ejected from a spray nozzle because it is capable of reflecting liquid

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ejected from a spray nozzle, such as the spray nozzle taught by Shimizu, as described above.

As to the following claims, Shimizu teaches the limitations as follows.

As to claim 3, a portion of said wall surface (5b) is defined by a planar surface perpendicular to an axis of the spray nozzle. (Examiner notes that Applicant has not specified in claim 3 as to which axis Applicant is referring, e.g., longitudinal axis, etc.)

As to claim 4, a portion of said wall surface (5a) is parallel to an axis of the spray nozzle (see page 6, last paragraph, and figure 2.) (Examiner notes that Applicant has not specified in claim 4 as to which axis Applicant is referring, e.g., longitudinal axis, etc.)

As to claim 5, a wall surface of the annular, protruded wall (5a and 5b) is defined by a forwardly spread surface or a forwardly constricted surface (see page 6, last paragraph, and figure 2.)

As to claim 29, the liquid supply tube (7) is substantially coaxial with the spray nozzle (10), (see figure 2.)

As to claim 32, Bellhouse et al. disclose a configuration wherein the annular, protruded wall is coaxial with a wall proximal to the annular, protruded wall (see fig. 3). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the annular, protruded wall taught by Bellhouse et al. in the Shimizu et al. spray nozzle such that the annular, protruded wall is coaxial with the wall of the Shimizu et al. spray nozzle because Bellhouse et al. disclose this nozzle configuration. Also, such a modification would have involved a mere change in the size

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or shape of a component. A change in size or shape is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

### ***Response to Arguments***

Applicant's arguments with respect to the above rejected claims have been considered but are not persuasive.

Applicant argues on page 5 that the references fail to teach or suggest an annular, protruded wall configured to reflect liquid ejected from a spray nozzle. Applicant argues that Bellhouse is not directed to a spray nozzle or a nozzle that sprays a liquid, but rather is directed to a syringe that accelerates a powdery material across skin or mucosal tissue. Applicant further argues that Bellhouse's "wall surface extending in a forward direction" that is identified by Examiner is a soft, annular spacer 13 that serves as a buffer area between the nozzle portion 7 and target tissue and as such, Bellhouse cannot teach or suggest a wall that reflects liquid ejected from a spray nozzle. Applicant also argues on page 6 that Bellhouse is not directed toward an endoscope as recited in claim 1, but rather is directed toward a needleless syringe capable of accelerating particles across skin or mucosal tissue. This is not persuasive because the annular, protruded wall disclosed by Bellhouse is capable of reflecting liquid ejected from a spray nozzle, such as the spray nozzle taught by Shimizu, as described above.

Applicant also argues on page 7 that the present invention is directed toward an endoscope having a liquid spraying nozzle and the Shimizu reference is directed toward

a needleless syringe capable of accelerating particles across skin or mucosal tissue, and thus the present claimed invention and the Shimizu reference are non-analogous. It appears that Applicant may have meant to refer to the Bellhouse reference rather than the Shimizu reference. In any case, this argument is not persuasive because the combination of the Shimizu and the Bellhouse references is appropriate and the references are analogous art in that they both are related to medical devices. The Shimizu reference is an endoscope spray tube and the combination of the Shimizu device with the annular, protruded wall taught by Bellhouse teach the structural limitations of the claimed invention.

With respect to Applicant's argument on page 7 that the specification on page 8, lines 10-13, discloses that that structure of the present invention "showed a remarkable advantage". This however is not persuasive because the structure of the present invention is suggested by the prior art as discussed above and Applicant has not shown that the claimed structure provides any unexpected results.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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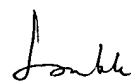
shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann Y. Lam whose telephone number is 571-272-0822. The examiner can normally be reached on Mon.-Fri. 10-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A.L.  5/10/06

  
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05/12/06